

Date: Sun, 27 Jun 93 22:05:33 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #785
To: Info-Hams

Info-Hams Digest Sun, 27 Jun 93 Volume 93 : Issue 785

Today's Topics:

 "Assualt" radio ban Scanner sought
 [ANS] Wanted: Simple,Cheap,2m antenna project
 Buckmaster FCC database formats
 Cable lenght-c.b. (2 msgs)
 Field Day: a bummer! (2 msgs)
 KAM FOR SALE
 Latest 2x2 calls for reg 1
 my DJ580T lost UHF RX...
 Need specs on Heath Phone Patch VU meter.
 QST Review for KWM-2.
 STS-57 Element Set GSFC-018
 vlf-konverter
 Whatever happened to VHF AM?? (2 msgs)
 Which are the present day "Good HF Rigs"
 Yaesu 415 HT Mods

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 27 Jun 1993 17:24:00 GMT
From: usc!howland.reston.ans.net!darwin.sura.net!uvaarpa!clem!clem!
news@network.UCSD.EDU
Subject: "Assualt" radio ban Scanner sought
To: info-hams@ucsd.edu

In article <740614366.AA00162@ronnie.wsnc.org>
Jim.De.Arras@f601.n151.z1.ronnie.wsnc.org (Jim De Arras) writes:

> Organization: Hand Held Products, Inc.

>

> With the coming assault radio bans, I would like to get the current best
> handheld scanner on the market, before I can no longer buy it. What are the
> best handheld scanners out there? The wider and more complete the frequency
> coverage, the better. Aircraft a must. FM wideband for broadcast a plus.

>

> Please e-mail any opinions you think would aid my decisions!

>

> --

> jmd@handheld.com

>

>

My thanks to all who responded! I picked up a MVT-7100 "assault" scanner while in Amsterdam last week. After VAT refund, the cost was about \$US480. I especially thank the .nl folks who directed me to the dealers that carried it, so I would be able to see one, without spending time I didn't have searching for a stocking dealer.

It's a great radio, well worth the money. I put it on the com monitor at my Eindhoven office, and it beats all it's specs by a wide margin, and about matches the test specs I saw "published" here. There are a very few spurs from the CPU that are recieved, these require more signal to overcome, and may be the source of the Yupiteru specs. One of the strongest was at 949.1Mhz , and required 1.37uv to get 12db sinad, which is still not too bad. 999 Mhz (the highest the monitor went) was .19uv for 12db sinad, which is more typical of the reciever in that band. Measured 6db bandwidth is 14.88 Khz in narrow FM with a -1.85 khz freq offset (error). The WFM bandwidth is 47.9Khz, again at the 6db points. AM sensitivity at 2 Mhz is .35uv for 12 db sinad, and .13 uv at 120.1 Mhz (aircraft band).

Those were the only measurements I had time to print out. I tested other points, and found the radio to be very consistant.

--

jmd@handheld.com

Date: 26 Jun 93 01:08:21 EDT

From: ghost.dsi.unimi.it!univ-lyon1.fr!vishnu.jussieu.fr!zaphod.crihan.fr!pipex!
sunic!psinntp!psinntp!arrl.org@tcgould.tn.cornell.edu

Subject: [ANS] Wanted: Simple,Cheap,2m antenna project

To: info-hams@ucsd.edu

In rec.radio.amateur.misc, gary@ke4zv.uucp (Gary Coffman) writes:

>PVC is somewhat more lossy than some other plastics. One test

>I've seen is to try it in the microwave oven. PVC melts, microwave
>safe plastic dishes don't. However, either will melt on a stove.
>So the difference is at least partially due to the difference in
>RF absorption. I'd imagine it's frequency dependent to a degree.
>I use PVC as standoffs for a gamma rod that matches my tower on
>160 meters. It hasn't melted at legal limit power.

So why don't you use microwave safe plastic dishes to make
standoffs? Wouldn't this be the logical conclusion from
your test results?

**Chart from an Al Bloom N1AL Posting

>From "Reference Data for Radio Engineers", Ch 4, Table 19 --
Characteristics of Insulating Materials:

Dissipation factor:

	1 MHz	100 MHz	3 GHz
Aluminum Oxide (ceramic)	.00033	.00030	.0010
Iron-sealing glass	.0005	.0009	.00199
Polystyrene	.00007	<.0001	.00033
Polycarbonate	.010	-	-
Polypropylene	<.0005	-	-
Nylon	.0218	.0200	.0117
Teflon	<.0002	<.0002	.00015
Epoxy resin (Araldite CN-501)	.019	.034	.027
Bakelite B M 120	.0280	.0380	.0438
Butyl rubber	.0010	.0010	.0009
Neoprene rubber	.038	.090	.034
Douglas fir	.026	.033	.027
Ruby mica	.0003	.0002	.0003
Soil, loamy dry	.018	-	.0011
100% Polyvinyl-chloride (PVC)	.0160	.0081	.0055

Looks like you are right Gary, PVC losses to tend to
be pretty frequency sensitive--its a bit **worse** than
might be predicted from the microwave oven test.

We should all keep in mind that a **broken** insulator is
often worse than a lossy one. While a fraction of a dB
may be statistically significant over the long term, you
can often work more stations with a **reliable** station,
than a marginally louder one.

Smart design can often mitigate the loss problem. I used
Lexan as a center insulator on my portable 6 meter beam.
While its too lossy to bother putting on the charts at VHF+,
it probably doesn't matter, since the feedpoint impedance
is only 25 ohms. However, I wouldn't use it to support

VHF quad loops a quarter wavelength from the feedpoint (or perhaps more descriptively, horizontal spreaders for a horizontally polarized quad.) It would make much more sense to place the supports at the current nodes (vertical spreaders).

Similarly, one might expect little loss using PVC to support yagi elements at the center, since they are being supported at low impedance points.

Perhaps the worse place to use PVC is at the inductor/capacitor junctions of tuned circuits--these are often high impedance points.

Given the electrical/mechanical tradeoffs, PVC is probably the best choice, followed by wood (which is even worse electrically!), assuming you don't have much in the way of tools/mechanical skills.

Those with a good shop should probably consider using aircraft aluminum (which often requires a more complicated mechanical/electrical design to deal with a good conductor, as opposed to a convenient insulator). Unfortunately, switching from one to another (conductive/nonconductive booms) often requires changing the element lengths as well. Aluminum antennas tend to be a lighter and more rugged, due to the better mechanical properties of the material.

Zack Lau KH6CP/1

Internet: zlau@arrl.org "Working" on 24 GHz SSB/CW gear
Operating Interests: 10 GHz CW/SSB/FM
US Mail: c/o ARRL Lab 80/40/20 CW
225 Main Street Station capability: QRP, 1.8 MHz to 10 GHz
Newington CT 06111 modes: CW/SSB/FM/packet
amtor/baudot
Phone (if you really have to): 203-666-1541

Date: Sun, 27 Jun 1993 16:37:36 GMT
From: usc!nic.csu.net!eis.CalState.EDU!rbisbey@network.UCSD.EDU
Subject: Buckmaster FCC database formats
To: info-hams@ucsd.edu

I purchased a Buckmaster CDRom at our local hamradio swapmeet, and went looking at the commercial license databases for AM/FM/TV. I didn't find a file containing the DB formats on the disk. I can figure out the record-length and many of the fields from the data, but having the DB formats handy would make things simpler. Does anyone have 'em?

73,

Richard
ng6q

Date: Sun, 27 Jun 1993 18:39:58 EST
From: usc!howland.reston.ans.net!agate!apple!goofy.apple.com!mumbo.apple.com!
John_P._Phillips%magic-bbs.corp.apple.com@network.UCSD.EDU
Subject: Cable lenght-c.b.
To: info-hams@ucsd.edu

I know this is not really an amature radio question but its as close as I
can find! I want to put a quarter wave cb antennae up in a tree, is there
an optimum length for the coax and where is the trade off point between
different diameters of coax?
please sed mail as I don't get to this conference often, thanks in advance.

Date: Mon, 28 Jun 1993 04:07:34 GMT
From: usc!wupost!csus.edu!netcom.com!grady@network.UCSD.EDU
Subject: Cable lenght-c.b.
To: info-hams@ucsd.edu

John_P._Phillips@magic-bbs.corp.apple.com wrote:
: can find! I want to put a quarter wave cb antennae up in a tree, is there
: an optimum length for the coax and where is the trade off point between

The length of coax does not matter. The diameter does not matter.
By far the most important consideration is to get your antenna up at least
30-50 ft. (whatever the CB regs permit) and to get it as far as possible
from metal objects like rain gutters, metal structures, etc.

You might consider leafing through the Technician's amateur question pool
available at Radio Shack to see how easy it really is to get an amateur
ticket and have a whole lot more fun once CB radio whets your appetite but
perhaps fosters an urge to get away from rude baboons. (You meet a much
more refined set of rude baboons in the amateur bands. :-))

--
grady@netcom.com Moby lexicons voice/fax (707) 826-7715

Date: Sun, 27 Jun 93 22:05:46 +0000
From: psinntp!wlnntp.psi.com!usenet@uunet.uu.net
Subject: Field Day: a bummer!
To: info-hams@ucsd.edu

I operated Field Day in class 1D (home station, commercial power) from here in Tempe, Arizona.

Propagation, to put it nicely, STUNK!!!

I only operated 6M and 10M, but listened on the other bands, and it seems like they had it no better.

So, how about it folks? How did it go in other parts of the country? (From what I heard on "Spectrum" on WWCR Saturday night, it was bad everywhere!)

Wayne Cronin WA5VIF
p00361@psilink.com

Date: Mon, 28 Jun 1993 00:21:01 GMT
From: usc!math.ohio-state.edu!caen!malgudi.oar.net!news.uakron.edu!neoucom.edu!wtm@network.UCSD.EDU
Subject: Field Day: a bummer!
To: info-hams@ucsd.edu

Field day was pretty good here in Kent, Ohio. I used an 80m 1/2 wave dipole strung between two trees about 10 meters above ground. I worked 75m phone and 10m phone under the callsign N8MC 5A/Ohio. I had lots of nice contacts on 75m both Saturday and Sunday running from my Kenwood TS-440S/AT running a Max of 100 watts. I ran solar power on Saturday afternoon and made 18 contacts on 75m. I could have made more contacts, but I ran out of daylight.

10 meters was good on Sunday morning from about 15:00-18:00 UTC. I made lots of contacts in regions 4, 5, and 0. The longest distance contact was to Colorado. Most contacts were in region 5 to North Texas and Alabama. I heard a LU2 station from Argentina from quite some time on ~28.47 MHz, but my TS-440 didn't have enough guts to get past the big guns in the pile-up. Several stations near me running higher power managed to log LU2. All this was with a dipole that was too long and too close to the ground; no fancy beams or high power.

My rating for this year's field day was pretty good. Even a Novice

1D station would have had a pretty fun time on 10m here in Ohio.

73,
Bill

--

Bill Mayhew NEOUCOM Computer Services Department
Rootstown, OH 44272-9995 USA phone: 216-325-2511
wtm@uhura.neoucom.edu amateur radio 146.58: N8WED/AA

Date: Sun, 27 Jun 1993 19:27:00
From: noc.near.net!mv!leotech!uucp@uunet.uu.net
Subject: KAM FOR SALE
To: info-hams@ucsd.edu

I have a Kantronics KAM for sale.

It has the version 5.0 firmware, and includes documentation and
cables.

It's in excellent condition and I'm the original owner. Includes the
factory installed mod for connecting an oscilloscope to the unit for
received signal monitoring.

Price is \$180 plus UPS or whatever shipping method you wish.

Call (603)889-1067 anytime. Responses on the net will probably not
reach
me.

73,
-Pete

~ OLX 2.1 TD ~ Yes, another creative tagline...

* Origin: NETIS (603)432-2517/432-0922 (HST/V32) (1:132/189)

Date: Sun, 27 Jun 1993 16:32:49 GMT
From: usc!howland.reston.ans.net!newsserver.jvnc.net!newsserver.egr.uri.edu!orca!
swamik@network.UCSD.EDU
Subject: Latest 2x2 calls for reg 1
To: info-hams@ucsd.edu

Hi

Does anyone know what the latest call is for region 1 of the US.
(I mean an advanced call like kd1??)

tnx es 73s
swamik@orca.ele.uri.edu

Date: Mon, 28 Jun 1993 02:46:19 GMT
From: usc!math.ohio-state.edu!magnus.acs.ohio-state.edu!csn!yuma!
yuma.acns.colostate.edu!hemstree@network.UCSD.EDU
Subject: my DJ580T lost UHF RX...
To: info-hams@ucsd.edu

I have had my DJ580T for about 15 months now. I performed the
red wire mod on its brain when I bought it. The extended receive
works fine. Now the sad part...

I have lost the receive capability on my UHF side. Well, I thought of
just about everything I can and I am now at a dead end.

So far I have:

changed antennas
changed batteries
reset the radio via Function-Power

The VHF side is still behaving properly, but for how long? BTW: the UHF
side still transmits, very well I might add.

Has anyone heard or seen of this problem? Any recommendations?

Thanks for the help,
Charles N0TQJ

--
!=====!
! Charles H. Hemstreet IV !internet: hemstree@cs.Colostate.Edu !
! Colorado State University ! or hemstree@lamar.Colostate.Edu !
!=====!

Date: 27 Jun 93 15:11:22 GMT
From: usc!howland.reston.ans.net!noc.near.net!transfer.stratus.com!jjmhome!

schunix!kshus@network.UCSD.EDU
Subject: Need specs on Heath Phone Patch VU meter.
To: info-hams@ucsd.edu

I picked up a Heathkit HD 15 Hybrid Phone patch. The VU meter has been severely damaged, and I want to replace it with a new one. Fair Radio offers a number of reasonably priced vu meters, but I need to know the ma rating, the resistance and other such specs. Heathkit has not been helpful, nor do they stock spares. I don't want to end up spending \$20 for the meter. Can anyone provide specs? Thanks Chris

Date: 27 Jun 93 15:23:12 EST
From: usc!wupost!spool.mu.edu!caen!malgudi.oar.net!uoft02.utoledo.edu!tulip!
mohan@network.UCSD.EDU
Subject: QST Review for KWM-2.
To: info-hams@ucsd.edu

Hello,

Can someone tell me which issue of QST carried a review of the Collins KWM-2 series of transceivers.

Thank you :)

--mohan (Waiting for call sign)

=====
+ Mohanakrishna Pakkurti + mohan@jupiter.cse.utoledo.edu +
+ HOME: 2239 University Hills Blvd #204, Toledo OH 43606. Phone:(419)536-9073 +
=====

Date: 27 Jun 93 18:48:31 GMT
From: news-mail-gateway@ucsd.edu
Subject: STS-57 Element Set GSFC-018
To: info-hams@ucsd.edu

SB SAREX @ AMSAT \$STS-57.018
STS-57 Element Set GSFC-018

The following represents the latest Keplerian element set as generated by Ron Parise, WA4SIR, at the Goddard Space Flight Center. This set is approximately 16 seconds earlier than GSFC-017 which was released yesterday.

STS-57

```
1 22684U 93 37 A 93177.98146547 0.00002730 00000-0 50108-4 0 187
2 22684 28.4574 275.8454 0061185 55.8988 304.7398 15.44468792 850
```

Satellite: STS-57

Catalog number: 22684

Epoch time: 93177.98146547 (26 JUN 93 23:33:18.62 UTC)

Element set: GSFC-018

Inclination: 28.4574 deg

RA of node: 275.8454 deg Space Shuttle Flight STS-57

Eccentricity: 0.0061185 Keplerian Elements

Arg of perigee: 55.8988 deg

Mean anomaly: 304.7398 deg

Mean motion: 15.44468792 rev/day Semi-major Axis: 6811.0715 Km

Decay rate: 0.27E-04 rev/day*2 Apogee Alt: 474.36 Km

Epoch rev: 85 Perigee Alt: 391.01 Km

NOTE - This element set is based on NORAD element set # 018.

The spacecraft has been propagated to the next ascending
node, and the orbit number has been adjusted to bring it
into agreement with the NASA numbering convention.

Submitted by Frank H. Bauer, KA3HDO, for the SAREX Working Group

/EX

Date: Sun, 26 Jun 93 15:30:00 CET

From: pipex!uknet!mcsun!Germany.EU.net!horga!mechti!aworld-2!aworld!

carsten@uunet.uu.net

Subject: vlf-konverter

To: info-hams@ucsd.edu

hello,

i want to build a converter for vlf (50KHz - 150KHz) to any 'normal'
shortwave-frequency.

although i have experience with electronic circuits i do not know how
to make such a converter.

i hope somebody can help me.

tschuess

carsten

CrossPoint v2.1 R ###

Date: 27 Jun 93 15:18:34 GMT
From: sdd.hp.com!col.hp.com!csn!copper!mercury.cair.du.edu!mnemosyne.cs.du.edu!
nyx!psthomas@network.UCSD.EDU
Subject: Whatever happened to VHF AM??
To: info-hams@ucsd.edu

Last October, at the local hamfair, I became the proud owner of a Hallicrafters SR 42A -- a 2m AM transceiver. The radio seems pretty nice and is almost certainly operational, but there's just nobody out there to talk to. Are there any 2m AM nets? Anybody with 2m AM DX?

I had (and, I think, still have) the possibility to get my claws into a 2m/6m AM transceiver, which I'd like (I enjoy somewhat obsolete equipment, including tube-based audio amplifiers, and teletype machines), but I don't know if there's anybody out there to talk with on 6m AM either.

Can anybody offer any suggestions? Should I just give in and buy a transverter for SSB/CW on 6/2, or is there any hope for VHF AM?

Incidentally, I'd also be appreciative if anybody could relate any statistics on my 42A... I'm not quite sure what it's capable of.

Thanks!

-- Patrick Thomas, KB8DGC

Date: 28 Jun 1993 04:52:12 GMT
From: sdd.hp.com!col.hp.com!bobw@network.UCSD.EDU
Subject: Whatever happened to VHF AM??
To: info-hams@ucsd.edu

psthomas@nyx.cs.du.edu (Patrick Thomas) writes:

>
> Last October, at the local hamfair, I became the proud owner of a
> Hallicrafters SR 42A -- a 2m AM transceiver. The radio seems pretty nice
> and is almost certainly operational, but there's just nobody out there
> to talk to. Are there any 2m AM nets? Anybody with 2m AM DX?
>

Well, Patrick, there is a reason why some people refer to AM as "Ancient Modulation". I haven't heard anyone operate AM on 2M since about 12 years ago when I coaxed someone into working me on an older Heathkit Twoer.

There must be someone out there that still works AM on 2, but its getting pretty sparse.

Bob KB0CY

Date: 27 Jun 93 15:21:56 EST
From: swrinde!gatech!howland.reston.ans.net!spool.mu.edu!caen!malgudi.oar.net!
uoft02.utoledo.edu!tulip!mohan@network.UCSD.EDU
Subject: Which are the present day "Good HF Rigs"
To: info-hams@ucsd.edu

Hello,

In an article titled "Equipping your first ham station" in QST of July 1985,
the author refers to the following as rigs which can serve well for a novice
and technician. The rigs named are :

Yaesu FT-101B, EE or E series
Drake TR-3 or TR-4
Kenwood TS-520
Ten-Tec Tritron 4 and its successor
Heath SB-100 or SB-101.

So, my question is the above list was made in 1985. If someone made a list now
what rigs will qualify in the same class. I need such info to choose a model
as my first HF rig. I will summarize the responses to this newsgroup.

Thank you very much :)
--mohan (Waiting for call sign)

=====
+ Mohanakrishna Pakkurti + mohan@jupiter.cse.utoledo.edu +
+ HOME: 2239 University Hills Blvd #204, Toledo OH 43606. Phone:(419)536-9073 +
=====

Date: Sun, 27 Jun 1993 18:34:37 GMT
From: swrinde!gatech!howland.reston.ans.net!ux1.cso.uiuc.edu!moe.ksu.ksu.edu!
usenet-feed.umn.edu!cnews@network.UCSD.EDU
Subject: Yaesu 415 HT Mods
To: info-hams@ucsd.edu

Anyone know of the mods for a Yeasu 415 handheld?

Thanks
Paul, KG0DZ

Date: 23 JUN 93 10:34:50

From: pa.dec.com!nntpd2.cxo.dec.com!nntpd.lkg.dec.com!ryn.mro4.dec.com!
cimfie.enet.dec.com!taber@decwrl.dec.com

To: info-hams@ucsd.edu

References <1vllka\$d98@morrow.stanford.edu>, <1vnevs\$nv9@moe.ksu.ksu.edu>,
<740722428snx@llondel.demon.co.uk>yn.mro

Subject : Re: Are we losing our technical abilities?

In article <740722428snx@llondel.demon.co.uk>, dave@llondel.demon.co.uk (David Hough) writes...

>

>I have never understood the American system of publishing the entire
>question pool in advance - or are there so many possible questions that you
>*can't* learn all the answers? I wish my University finals were published
>in advance - would have been a *lot* easier :-)

>

The exams are made public for a couple of reasons, first, it exposes the process to public review. The FCC claims that hams are examined on certain items and publishing the pool documents their claim. Second, it's published to prevent cheating on the part of the people who administer the exam. The requirements for getting a license are publicly known. Those who would make it easier AND THOSE WHO WOULD MAKE IT HARDER by changing the questions are breaking the law. Since the pool is known, a person is free to challenge it.

Some people claim they can be memorized. My take on it is that the person who goes to the trouble of memorizing several hundred questions and answers shows more dedication than the person who memorizes the few equations and works them out. ;-)

In fact, MOST of the exams require more memorization than anything else -- band edges, operating practices, etc. can't be derived or calculated. In short, the whole memorization thing is a red herring.

>Bring back some technical requirement to amateur radio world-wide. We have
>the allocations because we are supposed to use them for self-training and
>(hopefully) some serious experimentation. If the various administrations around
>the world see amateur radio turning into a glorified CB then that might be all
>we get left with after the commercial concerns have swiped our bands.

Are you saying that EVERYONE has to self-train and experiment? I can't speak for the UK, but in the US the vaunted "Basis and Purpose" statement at the head of the regulations mentions those as some of the reasons for having an amateur service. I don't think it would be a correct reading to say that people are required to do each and every one

of the the things specified -- they're free to pick the ones that interest them. By doing that, amateur radio as a whole meets it's purpose because *some* people experiment and *some* do public service and *some* promote international goodwill, etc.

Unless you can show that NO experimentation or self-training is going on, I don't think you can say that the service is failing to meet its goals.

>>>==>PStJTT

End of Info-Hams Digest V93 #785
